

ABSTRACT OF THE DISCLOSURE

A portable, handheld electronic navigation device includes an altimeter and a GPS unit. An internal memory stores cartographic data, for displaying the
5 cartographic data on a display of the navigation device. Accordingly, the device is capable of displaying cartographic data surrounding a location of the unit as determined by GPS and altitude information as determined by the barometric altimeter and GPS. The device provides an enhancement of the calibration and hence the accuracy of barometric altimeter measurements with the aid of derived altitudes from a GPS. The device is able
10 to determine the need for calibration and perform the subsequent computations necessary to facilitate the calibration. Furthermore, the device is able to determine a correction quantity that should be applied to barometric altitude readings, thereby allowing the device to be calibrated while in motion. Both of these features ultimately result in a more accurate determination of altitude. In accordance with an aspect of the invention, the
15 altimeter of the navigation device may be calibrated with altitude information entered by a user, with altitude information obtained from the cartographic, with altitude information derived from GPS or with any combinations thereof.